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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/535,562	05/19/2005	Abe Hidetoshi	58243US004	2794
32692	7590	09/06/2006	EXAMINER	
3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427			ZIRKER, DANIEL R	
			ART UNIT	PAPER NUMBER

1771

DATE MAILED: 09/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/535,562

Applicant(s)

HIDETOSHI, ABE

Examiner

Daniel Zirker

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 7/1, 7/5, 8/1, 8/5 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 7/1, 7/5, 8/1, 8/5 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

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1. The Examiner notes for the record that SN 10/378,240, recently abandoned and having no cited relationship with the pending application, appears to be in many aspects almost identical to a great amount of the disclosed and claimed subject matter of the pending application. Additionally, it features two inventors, including inventor Abe, whereas although the present application appears in several aspects to be broader than the '240 application, the only inventor listed is inventor Abe. Note also that two IDS's were filed in the '240 application, but none appear to have been filed in this application, and as such the Examiner has not been able to obtain copies of all the prior art cited, particularly in the last paragraph of page 1 and the first paragraph of page 2, since each of these reference numbers may very possibly be incorrect, as the Examiner was unable to obtain correct copies of any of these references. Clarification is requested.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. More particularly, "the polyurethane" cited in line two of the claim is vague, indefinite and confusing in that it fails to properly identify either of the two polyurethane species cited in claim 1.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-4, 7/1 and 8/1 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicants' admissions in the specification from page 1, lines 9 to 20, and page 2, lines 6 to 19, taken in view of Hackel, US 3,959, 562, either individually, or as further modified as evidence of the state of the art by either Exhibit D, the Hudson Online publication, page 2, 1st paragraph, or Exhibit A, the Huntsman publication, page 1, 1st and 8th paragraph, each of these latter two publications taken from art cited by applicant in the '240 application. Applicant essentially admits that the entire claimed marking film having such elements as a receptor film, a colorant thereon and a very specific adhesive layer on the opposing outer surface are known, as well as such elements as a protective film covering; the admissions failing to disclose a teaching of the composition which can comprise the thermoplastic resin film, which is at least a major element of the receptor film. The secondary reference Hackel, however, is relied upon as disclosing the utilization of flexible film backings that have excellent solvent resistance and can be prepared from mixtures of suitable thermoplastic polyester-urethane elastomers and thermoplastic phenoxy resins (Col 1, lines 27-29).

Alternatively, the two state of the art references each teach (Exhibit D) that polycaprolactone polyols are a subgenus of polyesters which offer better water resistance than standard polyesters, as well as superior oil and thermal resistance, and also (Exhibit A) that thermoplastic polycaprolactone polyurethanes have better resistance to hydrolysis than polyester polyurethanes. Accordingly, one of ordinary skill, motivated by the expectation of improved solvent, water, oil and hydrolysis resistance in

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the disclosed thermoplastic films and related marking film properties thereof would either incorporate the particular type backings taught in Hackel, or alternatively modify the polyester-polyurethane elastomer component taught therein in view of the teachings of either or both of the state of the art references to form polyurethanes comprising polyol units derived from polycaprolactone and put the resulting film in place of the film structures set forth in applicant's admissions and thereby form the claimed genus of articles. Other parameters such as the various glass transition temperature ranges of the receptor layer are believed to be obvious modifications to one of ordinary skill, in the absence of unexpected results.

6. Claims 5,6,7/5 and 8/5 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admissions in the specification from page 1, line 9 to page 2, line 19, and in particular of the cited admissions set forth above taken in view of applicant's admissions concerning JP-A-9-507309 and JP-B-3080674 found in this aforementioned admission section in the last paragraph of page 1. In particular, as above, applicant clearly appears to admit that the entire invention except for the receptor film composition is known, and with respect to the two cited Japanese references and their contents applicant admits that each disclosed film can include "the use of an acrylic resin", which is believed to give one of ordinary skill ample guidance to form his film utilizing the presence of a copolymer comprising at least one alkyl acrylate having 1 to 8 atoms in the alkyl group and methyl methacrylate, which are two extremely well known monomers of the acrylic family, in the absence of unexpected results.

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7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Note also Sher et al, relied upon in the '240 application, the PGPub in the '240 application to Abe et al, and US 656,567 to Abe et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel Zirker whose telephone number is 571-272-1486. The examiner can normally be reached on Monday - Thursday from 8:30 to 6:00. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris, can be reached on 571 - 272 - 1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Daniel Zirker
Primary Examiner
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A handwritten signature in black ink that reads "Daniel Zirker". The signature is written in a cursive, flowing style.